

WESTERN HEMLOCK/SALAL-DWARF OREGONGRAPE-SWO

Tsuga heterophylla/Gaultheria shallon-Berberis nervosa

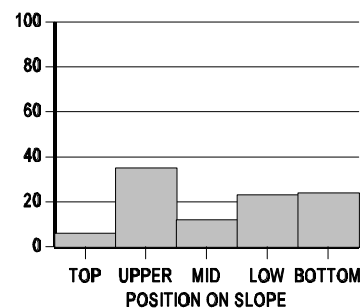
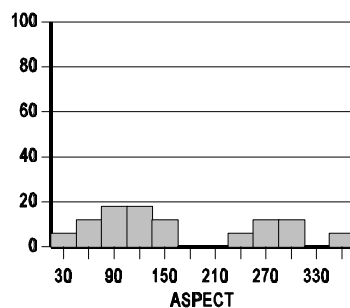
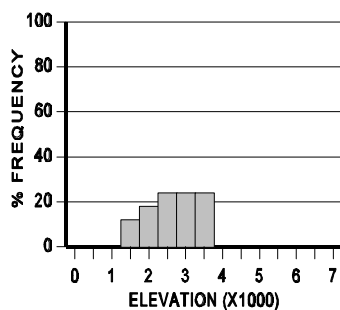
TSHE/GASH-BENE2-SWO (N=17; FS=17)



Distribution. This Association occurs on all Ranger Districts of the Umpqua National Forest and may occur on the South River Resource Area of the Roseburg District, Bureau of Land Management.

Distinguishing Characteristics. This Association occurs at low elevations, on warm, dry sites with gentle slopes. Whipplevine, a rocky site indicator, is often present. Other dry site indicators may also be present such as, canyon live oak, Piper's Oregongrape, and hairy honeysuckle. This Association is similar to the Western Hemlock/Dwarf Oregongrape and the Western Hemlock/Oregon Oxalis; both are described in the Willamette National Forest Plant Association Guide (Hemstrom, et. al. 1987).

Soils. This Association was found on 10 different parent materials and may be the most variable of the Series. Based on seven plots sampled, soils are shallow to



deep, and well drained to moderately well drained. Surface textures vary from loamy sand to clay loam, while four of the soils have a heavy clay layer beginning at 3 to 17 inches. Rock fragment content is also variable, from 0 to 60 percent. Subsurface textures include loamy sands, silt loams, and sandy loams. Subsurface rock fragments varied from 0 to 55 percent. The soil moisture regime is probably udic, and the soil temperature regime is probably mesic. Soils classify into the following subgroups: Typic Hapludalfs, Haploxeralfs and Paleixeralfs, Typic Xerochrepts and Dystrochrepts.

Environment. This Association averages 2870 feet in elevation and occurs predominantly on north, east, and west aspects. Slope averages 35 percent and ranges from 5 to 70 percent. This Association occurs on all slope positions.

Vegetation Composition and Structure. Total species richness is very high for the Series, averaging 36. Douglas-fir and western hemlock are present in the overstory. White fir and incense-cedar are common, while sugar pine is occasional. Pacific yew, Douglas-fir, golden chinquapin, western hemlock, and white fir are frequently encountered in the understory. Vine maple may be dense in some areas. Other hardwoods include big-leaf maple, Pacific madrone, Pacific dogwood, and canyon live oak. In the shrub layer, dwarf Oregongrape and salal are present. Red huckleberry, baldhip rose, and Pacific blackberry are frequent. Western twinflower, western sword-fern, and round-leaved violet are almost always present. Moss cover is fairly high for the Series, averaging 20 percent.

Upper and mid-layer tree covers are high for the Series, averaging 74 and 65 percent cover, respectively. Lower layer tree cover averages 39 percent. Shrub cover is low to intermediate, with high shrub cover averaging only 5 percent and low shrub cover 34 percent. Herb/grass cover ranges from 8 to 90 percent and averages 22 percent.

Common name	Code	Constancy	Cover	Avg. Richness
<u>Overstory trees</u>				3
Douglas-fir	PSME	100	50	
Western hemlock	TSHE	76	18	
<u>Understory trees</u>				7
Western hemlock	TSHE	100	36	
Pacific yew	TABR2	94	8	
Douglas-fir	PSME	94	5	
Golden chinquapin	CACH6	94	5	
White fir	ABCO	82	8	
<u>Shrubs</u>				11
Salal	GASH	100	15	
Dwarf Oregongrape	BENE2	100	13	
Baldhip rose	ROGY	88	1	
Pacific blackberry	RUUR	88	1	
Vine maple	ACCI	82	20	
<u>Herbs</u>				18
Round-leaved violet	VIOR	100	1	
Western sword-fern	POMU	94	5	
Western twinflower	LIBOL	94	4	